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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRUONG, DENNIS

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,982	Applicant(s) MATHIESEN ET AL.	
	Examiner DENNIS TRUONG	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-13,15-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-13,15-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/22/2010 has been entered.

Response to Amendment

2. It is acknowledged that claims have been amended claims 1, 6, 13, 15 and 19 have been amended, and claims 5, 14 and 20 have been canceled.

3. Claims 1, 3, 4, 6-13, 15-19, 21, 22 are pending.

Response to Arguments

4. Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground(s) of rejection.

35 USC 101

5. As per Claims 15-18 the claims recite "computer readable medium" and in view of the specification, page 16 lines 5-7 further defining the medium as "magnetic disk, CD-ROM, or DVD, Hard disk..." This indicates that the medium is drawn to storage medium and not to any form of energy, waves, or any form of propagation or the like, therefore complies with 35 USC 101.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 13, 15, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ogawa et al. (US 20030200058 A1) as in view of Travagline et al. (US 6577988 B1).

As per Claim 1, Ogawa discloses:

- **A method to carry out at least one of retrieving or accessing information about an equipment, plant or process in a facility comprising a plurality of devices and one or more control systems for process monitoring and control, wherein energy-related information and other data for each said device is stored in a one of said control system systems,** paragraph [0016] “using a portable maintenance terminal device having at least a head-mount display to inspect and service equipment (hereinafter referred to as plant equipment) such as valves and measuring instruments or the like in a plant such as an incineration plant that has a monitoring room”
- **selecting by a maintenance user using a hand-held or wearable portable computing device one of said equipment, plant or process,** at least by paragraph [0020] “maintenance terminal device 6 comprising at least a wearable personal computer (portable computer)”, and paragraph [0033] “a number of monitoring screens are provided for different pieces of plant equipment 1 and can be selected from the maintenance terminal device 6.”
- **configuring a software entity recorded on a computer readable medium with an identity of the selected said equipment, plant or process, the software entity comprising links to information regarding all equipment, plant, process monitored**

and controlled by the control systems, at least by paragraph [0033] “a number of monitoring screens are provided for different pieces of plant equipment 1 and can be selected from the maintenance terminal device 6.”

- **retrieving information associated with said selected equipment, plant or process with the configured software entity, the information comprising maintenance information, technical information, and contact information for at least one of internal users and external users having technical knowledge about the selected equipment, plant or process**, at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.” Which discloses the technical and maintenance information, and paragraph [0024] “A that enables the control panel 5 to be operated from the maintenance terminal device 6 and an online conferencing function B that enables conversation, i.e. conferencing, between the worker using the maintenance terminal device 6 and a monitoring worker in the central monitoring room 3” discloses monitoring worker in the central monitoring room as the internal or external user having technical knowledge about the selected equipment.
- **But Ogawa fails to disclose: (a) presenting or displaying on said portable computing device at least information about a new event or an alarm for said selected device and at the location of said equipment, plant or process to a maintenance user, utilizing by the maintenance user the information to address the new event or alarm,**

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- **and establishing contact by the maintenance user with at least one internal user or at least one external user about the selected, equipment, plant or process if the maintenance user cannot address the new event or alarm with the retrieved information, and providing of information to the maintenance user by the at least one internal user or at least one external user to address the new event or alarm,** at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.” Which discloses the technical and maintenance information, and paragraph [0024] “A that enables the control panel 5 to be operated from the maintenance terminal device 6 and an online conferencing function B that enables conversation, i.e. conferencing, between the worker using the maintenance terminal device 6 and a monitoring worker in the central monitoring room 3” discloses monitoring worker in the central monitoring room as the internal or external user having technical knowledge about the selected equipment and it should be understood that with conferencing and remote video capabilities that further assistance from the monitoring work can be provided.

However, **Travagline** discloses **(a)** at least by (col. 5 lines 26-38) “program instructions that monitor the information stored in the server computer system 70 for alarm events or other conditions requiring immediate attention and thereupon notify appropriate personnel, for example, by sending a message to a notification device 64. Such a device could be a pager, a cellular device, a Personal Digital Assistant (PDA), or any similar device”

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Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Travagline** into the teaching of **Ogawa** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of monitoring and performing at least all of the test, diagnostics, and maintenance operations with remote assistance without being restricted to one location which increasing the efficiency of the maintenance.

As per claim 2, canceled.

As per claim 3, claim 1 is incorporated and Ogawa fails to disclose:

- **assigning the new event or alarm for said equipment, plant or process to a maintenance user.**

However, **Travagline** discloses (a) at least by (col. 5 lines 26-38) “program instructions that monitor the information stored in the server computer system 70 for alarm events or other conditions requiring immediate attention and thereupon notify appropriate personnel, for example, by sending a message to a notification device 64. Such a device could be a pager, a cellular device, a Personal Digital Assistant (PDA), or any similar device”

Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Travagline** into the teaching of **Ogawa** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of monitoring and performing at least all of the test, diagnostics, and maintenance operations with remote assistance without being restricted to one location which increasing the efficiency of the maintenance.

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Claim 13 refers to a computer program product for retrieving and/or accessing information about an equipment, part or process comprising a computer readable medium and computer code means corresponding to method claim 1, and is rejected under the same reason set forth in connection to rejections of claim 1. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

As per claim 14, canceled.

Claims 15 refers to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, part or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claim 1 respectively, and are rejected under the same reason set forth in connection to rejections of claim 1 respectively above. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

Claims 19 is a control system claim corresponding to the method claim 1, and is rejected under the same reason set forth in connection to rejections of claim 1 respectively above. Where **Ogawa** discloses a system at least by Fig. 2, 3 and 4.

As per claim 22, claim 1 is incorporated and Ogawa further discloses:

- **wherein the information further comprises system data, user data, object data, technical information, specification, supplier information; a user knowledgeable about the selected equipment, plant, or process; a user responsible the selected equipment, plant, or process; users trained about the selected equipment, plant, or process; technical drawings of the selected equipment, plant, or process; contact information regarding users of the selected equipment, plant, or process; or safety**

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information regarding the selected equipment, plant, or process, at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.”

8. **Claims 4-7, 11, 12, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa and Travagline** further in view of **Tonack (US 7120830 B2)**

As per Claim 4, Claim 1 is incorporated and further neither Ogawa nor Travagline discloses:

- **retrieving an address for an external user or expert and presenting the address to the maintenance user.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 4-26) teaching a maintenance coordination software, where maintenance calls are placed and maintenance technicians are made aware of the maintenance calls in a number of ways; through a terminal listing, email or pager calls, and possible email server can send out notifications to particular locations so that specific technicians related to the locations are notified. Also (col. 10 lines 43-44) “wherein the remote computer is further configured to relay the content of the alert to a maintenance technician”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that

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automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 5, Claim 4 is incorporated and further Qgawa discloses:

- **establishing contact between the external user or expert and the maintenance user,** at least by (paragraph [0027]) “conferencing function B enables wireless conversation (through the microphone 23, speaker 24, microphone 32, and earphone 33) between the control panel 5, which is a parent station, in the central monitoring room 3 and one or more maintenance terminal devices 6”.

As per Claim 6, Claim 4 is incorporated and further Ogawa discloses:

- **establishing a shared display or shared computer application contact between the external user or expert and the maintenance user,** at least by (paragraph [0027]) “The conferencing function B enables wireless conversation (through the microphone 23, speaker 24, microphone 32, and earphone 33) between the control panel 5, which is a parent station, in the central monitoring room 3 and one or more maintenance terminal devices 6, which are child stations, interconnected by wireless, and displays on the display 22 of the control panel 5 in the central monitoring room 3 the video image of a site captured (during patrol) by the CCD camera 34 provided in the HMD”

As per Claim 7, Claim 1 is incorporated and further neither Ogawa nor Travagline discloses:

- **configuring a selected technical characteristic of the selected said equipment, plant or process with an indicator of a high, medium or low priority for returning the selected said equipment, plant or process to a normal state.**

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However, **Tonack** teaches the above limitations at least by (col. 6 lines 1-18) “indicate the operable condition of the machine....Select Problem Code....Operator Notes” where each of these data fields provides the condition of the device providing information which can be used to prioritize the importance of the repair to the failed device. Furthermore (col. 6 lines 49-53) “maintenance and repair technicians can better prioritize their response to service calls if they are experiencing multiple simultaneous failures.”

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa and Travagline** because one of ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 11, Claim 1 is incorporated and further neither Vines nor Meeker discloses:

- **attaching a user observation to the retrieved information associated with said equipment, plant or process as any from the list of: a text message, a video clip, a photograph, sketch, sound recording.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) disclosing information entered by the technician such as information related to the repair efforts.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Meeker** because one of ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects

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faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 12, Claim 1 is incorporated and further neither Vines nor Meeker discloses:

- **carry out a repair, re-configure, re-programming or replacement of a faulty part of said equipment, plant or process based at least in part on technical information associated with said equipment, plant or process retrieved and/or presented utilizing the software entity.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) “During the repair effort or upon its completion...” the technician has the ability to enter information related to the repair efforts.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Meeker** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

Claim 16-18 refer to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, plant or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claim 4 and is rejected under the same reason set forth in connection to rejections of claim 4 above. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

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9. **Claims 8 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa and Travagline** further in view of **Vines (US 6006171 A)**.

As per claim 8, claim 1 is incorporated and neither Ogawa nor Travagline discloses:

- **configuring a technical information link of component of a said equipment, plant or process with an identity of an internal user with access to relevant technical information,**

However **Vines** teaches the above limitation at least by (col. 6 lines 1-6) “pertinent information about the work order such as if and when the work has been schedules, estimated time to completion and crew assigned to do the work, are displayed on the screen.” Which provides a link to the crew assigned to do the work therefor has access to relevant technical information.

Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Vines** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of having the ability to contact someone knowledgeable who can assist in the maintenance while on site increasing the efficiency of the maintenance.

As per claim 21, claim 1 is incorporated and neither Ogawa nor Travagline discloses:

- **wherein the maintenance information comprises at least one of service history or service documentation,**

However **Vines** teaches the above limitation at least by (col. 5 lines 51-54) " track the history of work that has been performed on a specific piece of equipment by viewing the equipment history screen shown in FIG. 8”

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Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Vines** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of having the ability to track repair history which provides insight into maintaining the equipment properly.

10. **Claims 9-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa, Travagline and Vines** further in view of **Tonack (US 7120830 B2)**.

As per Claim 9, Claim 8 is incorporated and further neither Ogawa, Travagline nor Vines discloses:

- **configuring said equipment, plant or process with an identity of the internal user with dependent on information recorded in the internal user profile.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa, Travagline and Vines** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

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As per Claim 10, Claim 8 is incorporated and further neither Ogawa, Travagline nor Vines discloses:

- **configuring said equipment, plant or process with an identity of a user with dependent on information recorded in the internal profile classified by any from the list of: responsibility, training, certified qualification, work experience.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa, Travagline and Vines** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per claim 23, canceled.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157.

The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit
2169

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